Statement of Work

Acquisition of Global Hawk Compatible Batteries for UAVSAR

03 SEPTEMBER 2010

I. Objective/Summary

This acquisition will be funded with American Recovery Reinvestment Act of 2009 funds.

NASA Dryden Flight Research Center (DFRC) is implementing the NASA JPL and DFRC developed Uninhabited Aerial Vehicle Synthetic Aperture Radar (UAVSAR) Pod for use on the NASA Global Hawk (GH) aircraft. This effort is utilizing government furnished UAVSAR instruments that will be attached to new Pod Attachment Assemblies and installed on each wing of the aircraft.

The UAVSAR pods require batteries to maintain power to the electronics when the aircraft provided payload power is not available. These batteries must be compatible with the Global Hawk system and be qualified for the environment on the aircraft.

This acquisition is for the batteries, to be installed in the Global Hawk aircraft, specifically for use in the UAVSAR pods. A total of three batteries are required, one battery for each pod. If feasible, one *or two* additional batteries will be ordered. Final determination of order quantity will be made during evaluation of quotes.

II. Task Description

1. UAVSAR Pod Batteries

The contractor shall provide three batteries that are compatible with the Global Hawk aircraft and meet the power requirements for the UAVSAR pods, which are of the type and part number:

24 VDC Li-ion Battery, Global Hawk Part Number 3671213E08017-1

The batteries shall meet, at minimum, the following specifications:

Nominal Voltage	24 Volts
Nominal Capacity	50 Ah at 1 hour rate
Charging Voltage	28.5 Volts
Dimensions (Maximum)	
Length	7.6 inches
Width	12.2 inches
Height	7.6 inches
Weight (Maximum)	40 lbs

Must meet the following environmental requirements.

Operating Temperature	-40 deg C to 80 deg C
Maximum Operating Altitude	60,000 feet

Must have a battery management system that includes charge control, cell balancing, safety, and protection.

Must be compatible with the Global Hawk aircraft charger.

Must include telemetry such as state of the charge.

2. Delivery of Equipment

The batteries will be delivered to the NASA Dryden Flight Research Center. Upon arrival of the equipment at NASA DFRC, a NASA Quality Assurance representative will inspect the equipment and QA documentation before acceptance.

3. Quality Assurance

For the purposes of this procurement, the hardware being purchased is considered "Flight Critical Hardware." In addition to the contractor's internal Quality Assurance (QA) policies and procedures the contractor shall be required to adhere to the DFRC QA policy described in Attachment 1.

III. Place of Performance / Travel:

1. All work under this task shall be at the contractor location.
2. No travel is required for this task.

IV. Period of Performance:

All equipment will be delivered by nine (9) months after receipt of order. Upon arrival of the equipment at NASA DFRC, a NASA Quality Assurance representative will inspect the equipment and QA documentation before acceptance. Installation of the batteries shall be accomplished by NASA DFRC personnel.

V. Deliverables:

1. Three (3) Global Hawk UAVSAR Pod Batteries.
2. Optional (1) Global Hawk UAVSAR Pod battery #4.
3. Optional (1) Global Hawk UAVSAR Pod battery #5.
4. Quarterly Recovery Act Reporting Requirements as necessary.

VI. Government Furnished Items

None.

VII. Milestones

All dates are from date of award.

1. Each month the contractor will provide a report on the progress of fulfilling this SOW.

2. All batteries shall be delivered no later than May 30, 2011. Performance is considered timely if delivery is completed 90 days after receipt of order. Performance exceeds expectation if delivery is completed *before* the established performance period. Contractor fails to meet the milestone if delivery is completed after the established performance period.

VIII. Attachments

1. Q-4, CERTIFICATE OF CONFORMANCE (PRODUCER)